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| APPLICATION NO.                             | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-----------------|----------------------|---------------------|------------------|
| 10/623,218                                  | . 07/18/2003    | Heinz-Peter Rink     | IN-5553CP           | 2736             |
| 26922                                       | 7590 04/27/2005 | ·                    | EXAMINER            |                  |
| BASF CORPORATION                            |                 |                      | ROBERTSON, JEFFREY  |                  |
| ANNE GERRY SABOURIN<br>26701 TELEGRAPH ROAD |                 |                      | ART UNIT            | PAPER NUMBER     |
| SOUTHFIELD, MI 48034-2442                   |                 |                      | 1712                |                  |

DATE MAILED: 04/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |   | /   |             |  |  |  |
|--|---|---|-------------|--|--|--|
|  | Application No.   | Applicant(s)  |             |  |  |  |
|  | 10/623,218  | RINK ET AL.   |             |  |  |  |
| Office Action Summary  | Examiner  | Art Unit  |             |  |  |  |
|  | Jeffrey B. Robertson  | 1712  |             |  |  |  |
| The MAILING DATE of this communication ap<br>Period for Reply  | pears on the cover sheet with the o   | orrespondence addre   | 988         |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep If NO period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may a reply be tirely within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE | nely filed  s will be considered timely. the mailing date of this common (35 U.S.C. § 133). | nunication. |  |  |  |
| Status   | ,   |   |             |  |  |  |
| 1) Responsive to communication(s) filed on 18.   | <i>luly</i> 2003.   |   |             |  |  |  |
| 2a)☐ This action is <b>FINAL</b> . 2b)⊠ Thi  | s action is non-final.  |   |             |  |  |  |
| 3) Since this application is in condition for allows   | ance except for formal matters, pro   | osecution as to the m   | erits is    |  |  |  |
| closed in accordance with the practice under   | Ex parte Quayle, 1935 C.D. 11, 4  | 53 O.G. 213.  |             |  |  |  |
| Disposition of Claims  |   |   |             |  |  |  |
| 4)⊠ Claim(s) <u>1-12</u> is/are pending in the application   | ٦.  |   |             |  |  |  |
| 4a) Of the above claim(s) is/are withdra   | awn from consideration.   |   |             |  |  |  |
| 5) Claim(s) is/are allowed.  | Claim(s) is/are allowed.  |   |             |  |  |  |
| 6)⊠ Claim(s) <u>1-12</u> is/are rejected.  | ☑ Claim(s) <u>1-12</u> is/are rejected.   |   |             |  |  |  |
| 7)⊠ Claim(s) <u>3 and 9-11</u> is/are objected to.   | ☑ Claim(s) <u>3 and 9-11</u> is/are objected to.  |   |             |  |  |  |
| 8) Claim(s) are subject to restriction and/  | or election requirement.  |   |             |  |  |  |
| Application Papers   |   |   |             |  |  |  |
| 9)☐ The specification is objected to by the Examin   | er.   |   |             |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.  |   |   |             |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |   |             |  |  |  |
| Replacement drawing sheet(s) including the correct   | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  |   |             |  |  |  |
| 11)☐ The oath or declaration is objected to by the E   | xaminer. Note the attached Office   | Action or form PTO-   | 152.        |  |  |  |
| Priority under 35 U.S.C. § 119   |   |   |             |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documen</li> <li>2. Certified copies of the priority documen</li> <li>3. Copies of the certified copies of the priority application from the International Burea</li> </ul>  | ts have been received.<br>ts have been received in Applicati<br>prity documents have been receive   | on No   | age         |  |  |  |
|  | * See the attached detailed Office action for a list of the certified copies not received.  |   |             |  |  |  |
|  |   | ,   |             |  |  |  |
| Attachment(s)  |   | •   |             |  |  |  |
| 1) Notice of References Cited (PTO-892)  | 4) Interview Summary  | (PTO-413)   |             |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Da   | ate   | 0)          |  |  |  |
| <ol> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date <u>0703</u>.</li> </ol>  | 6) ☐ Notice of Informal F   | Patent Application (PTO-15  | 2)          |  |  |  |

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04) Art Unit: 1712

## **DETAILED ACTION**

## Claim Objections

- 1. Claims 3 and 9-11 are objected to because of the following informalities: For claim 3, the expression "according to Fox" should be clarified as to clearly identify how the Tg is determined. For claim 9, in line 1, resin is spelled incorrectly. Appropriate correction is required.
- 2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-12 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO '049 (Serial # 09/763,279

Application/Control Number: 10/623,218

Art Unit: 1712

provided by applicant. All references to column and line numbers are to this application, See IDS).

For claim 1, the reference teaches that polyacrylates having hydroxyl numbers of 100-200 are used in a coating composition corresponding to applicant's component A). See page 30, lines 8-14. Preferred polyacrylates are polymerized products made by polymerizing 20-60% by weight of cycloalkyl methacrylate and 8-60% by weight of hydroxyl alkyl acrylates. For claims 2 and 3, the reference teaches solids contents of 70.1 where the viscosity is <100 dPas. Tables 1 and 3. For claim 4, the cycloaliphatic monomer can be cyclohexylacrylate. See page 32, line 8. For claims 1 and 5-7, the reference also teaches that a portion of the mixture can be replaced by reactive diluents including polyols such as diethyloctanediols. Page 37, lines 19-26. It is the examiner's position that the reference teaches that the reactive diluents are present in the polymerization of the polyacrylates. Alternatively, as suggested by the reference, it would have been obvious to one of ordinary skill in the art at the time of the invention to add the reactive diluents in the polymerization of the polyacrylates.

For claims 8-11, for component B), the reference teaches polyaddition products that have hydroxyl groups. Page 2, line 25 and page 16, lines 5-16. In Example 1, the reference exemplifies resins with a Mn of 1,430, which is within applicant's range.

For component C), the reference teaches crosslinkers on page 38, lines15-19. For claim 12, in Table 5, the reference teaches that curing is done thermally.

Application/Control Number: 10/623,218

Art Unit: 1712

5. Claims 1-4, and 8-12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Aerts et al. WO 96/20968 see IDS.

For claims 1-4, Aerts teaches a composition that is made by blending a hydroxyl branched oligoester having a Mn of between 150-300 (Applicant's component B)), a hydroxyl functional acrylic copolymer (Applicant's component A)), and a crosslinking agent (Applicant's component C)). Page 4, lines 14-36. For component A), Aerts teaches that the acrylic copolymer is made through copolymerization of a hydroxyl functional monomer and a cycloaliphatic monomer including isobornyl methacrylate. Page 8, line 16 through page 9, line 25. See also page 11, lines 33-37. The examiner's position is that a portion of the hydroxyl functional monomer set forth in Aerts is also capable of acting as the reactive diluent set forth by applicant.

For claims 8-11, on page 6, line 30 through page 8, line 15, Aerts teaches the presence of oligoesters as set forth by applicant.

For claim 12, Aerts teaches thermal curing on page 15, lines 3-5.

6. Claims 1-4 and 12 are rejected under 35 U.S.C. 102(e or b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over each of DE'421 and Zeller et al. (U.S. Patent No. 6,274,660, see IDS). These references are believed to be equivalents.

For claims 1-3, Zeller teaches a composition that is made by blending a polyol having a Mn of between 400-1000 (Applicant's component B)), a hydroxyl functional

Art Unit: 1712

acrylic copolymer (Applicant's component A)), and a crosslinking agent (Applicant's component C)). Col. 7, lines 27-41, col. 8, lines 23-64, ans col. 11, lines 22-38. For component A), Zeller teaches that the acrylic copolymer is made through copolymerization of a hydroxyl functional monomer and a cycloaliphatic monomer including isobornyl methacrylate. Col. 8, lines 23-38. The examiner's position is that a portion of the hydroxyl functional monomer set forth in Zeller is also capable of acting as the reactive diluent set forth by applicant.

For claim 12, Zeller teaches thermal curing in col. 15, lines 12-17.

## Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nixon et al. (U.S. Patent No. 6,433,097) is cited for general interest. Regarding the IDS, the examiner has crossed out the duplicate references to DE 196 00 146 A1, DE 198 05 421, and DE 44 07 415 A1. In addition, the reference to the Kim article, page 61 has been crossed out because it is not present in this file or the parent file.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey B. Robertson whose telephone number is (571) 272-1092. The examiner can normally be reached on Mon-Fri 7:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1712

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeffrey B. Robertson Primary Examiner Art Unit 1712

**JBR**